**RT- CPV- AFA / 2020 Nº 07**

MAPEAMENTO TERMOGRÁFICO DO CONJUNTO PORTA VENTO - AFA

**1 - OBJETIVO**

Este relatório visa apresentar o perfil térmico superficial dos Conjuntos Porta Vento, através da inspeção termográfica das paredes externas dos mesmos.

**2 - INSTRUÇOES DE TRABALHO**

2.1- Instruções de trabalho desenvolvidas e validadas pela Manserv Industrial, através de seu sistema de gestão da qualidade e normas internas de segurança;

2.2 - Procedimentos operacionais e normas internas de segurança da ArcelorMittal Monlevade;

2.3 - Normas e padrões de temperaturas máximas admissíveis para equipamentos e componentes, segundo seus fabricantes;

2.4 - Utilizamos emissividade de 0.92 como padrão em todas as tomadas termográficas efetuadas nesta inspeção.

**3 - ATIVIDADES REALIZADAS**

No dia 28 de setembro de 2020, foi realizado mapeamento térmico na estrutura externa do conjunto porta vento, (Saída Porta Vento/Avião, Down Leg e Algaraviz Joelho e Algaraviz Nariz).

**4 - DADOS OPERACIONAIS E AMBIENTAIS**

Durante todo o mapeamento termográfico a temperatura de sopro manteve-se em 1104ºC e a vazão de ar em 129840 Nm3/h. A temperatura ambiente média foi de 28ºC; velocidade do vento 0,2 m/s

**5 - OBSERVAÇÕES DA INSPEÃO**

5.3. As seguintes peças encontravam-se com refrigeração forçada a ar comprimido:

**SAÍDA PORTA VENTO:**

VT 06;

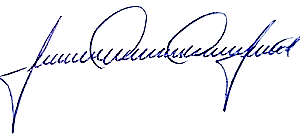
**ALGARAVIZ (NARIZ):**

VT 03/NR M159; VT 04/NR M167; VT 05/NR M101; VT 06/NR 32 M119; VT 08/NR M132; VT 09/NR 11; VT 10/NR M164; VT 11/NR M165; VT 12/NR M168; VT 11/NR M165; VT 13/NR M123; VT 15/NR M156; VT 16/NR M163; VT 17/NR 24 M114; VT 18/NR 15 M129; VT 19/NR M154; VT 20/NR M160; VT 21/NR M162; VT 22/NR M155

A Manserv Industrial agradece a preferência, e coloca-se ao inteiro dispor para todos os esclarecimentos que se fizerem necessário.

Atenciosamente,

Gilmar Cristino Campos Júnior Executante Técnico



Fabricio Ezequiel Marçal Executante Técnico

Jaderson Tiago Gonçalves Supervisor de Operação Termografia / SPCI



MAPAS TÉRMICOS – SAÍDA PORTA VENTO

**MAPEAMENTO TÉRMICO – SAÍDA PORTA VENTO**

# **VT03 / LD**

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**MAPEAMENTO TÉRMICO – SAÍDA PORTA VENTO**

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**MAPEAMENTO TÉRMICO – SAÍDA PORTA VENTO**

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**MAPEAMENTO TÉRMICO – SAÍDA PORTA VENTO**

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**MAPEAMENTO TÉRMICO – SAÍDA PORTA VENTO**

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**MAPEAMENTO TÉRMICO – SAÍDA PORTA VENTO**

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MAPAS TÉRMICOS – DOWN LEG

**MAPEAMENTO TÉRMICO – DOWNLEG**

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# **VT03 - DL XX / LD**

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# **VT01 - DL XX / LE**

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**MAPEAMENTO TÉRMICO – DOWNLEG**

# **VT08 - DL XX / LD**

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# **VT07 - DL XX / LD**

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**MAPEAMENTO TÉRMICO – DOWNLEG**

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**MAPEAMENTO TÉRMICO – DOWNLEG**

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MAPAS TÉRMICOS – ALGARAVIZ JOELHO

**MAPEAMENTO TÉRMICO – ALGARAVIZ JOELHO**

# **VT04 - JL M167 / LD**

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# **VT01 - JL M157 / LD**

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# **VT03 - JL M159 / LD**

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# **VT02 - JL 06 / LD**

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# **VT01 - JL M157 / LE**

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# **VT02 - JL 06 / LE**

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# **VT03 - JL M159 / LE**

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# **VT04 - JL M167 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ JOELHO**

# **VT07 - JL M117 / LD**

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# **VT06 - JL 32M119 / LD**

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# **VT05 - JL M101 / LD**

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# **VT08 - JL M132 / LD**

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# **VT08 - JL M132 / LE**

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# **VT07 - JL M117 / LE**

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# **VT05 - JL M101 / LE**

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# **VT06 - JL 32M119 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ JOELHO**

# **VT09 - JL 11 / LD**

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# **VT10 - JL M164 / LD**

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# **VT11 - JL M165 / LD**

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# **MAX= ---ºC**

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# **VT12 - JL M168 / LD**

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# **VT12 - JL M168 / LE**

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# **VT11 - JL M165 / LE**

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# **VT10 - JL M164 / LE**

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# **VT09 - JL 11 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ JOELHO**

# **VT13 - JL M123 / LD**

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# **MAX= ---ºC**

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# **VT14 - JL M152 / LD**

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# **MAX= ---ºC**

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# **VT15 - JL M156 / LD**

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# **MAX= ---ºC**

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# **VT16 - JL M163 / LD**

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# **VT16 - JL M163 / LE**

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# **VT15 - JL M156 / LE**

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# **VT14 - JL M152 / LE**

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# **VT13 - JL M123 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ JOELHO**

# **VT17 - JL 24M114 / LD**

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# **VT18 - JL 15M159 / LD**

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# **VT19 - JL M154 / LD**

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# **VT20 - JL M160 / LD**

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# **VT20 - JL M160 / LE**

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# **VT19 - JL M154 / LE**

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# **VT18 - JL 15M159 / LE**

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# **VT17 - JL M114 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ JOELHO**

# **VT21 - JL M162 / LD**

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# **VT22 - JL M155 / LD**

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# **VT22 – JL M155 / LE**

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# **VT21 - JL M162 / LE**

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MAPAS TÉRMICOS – ALGARAVIZ NARIZ

**MAPEAMENTO TÉRMICO – ALGARAVIZ NARIZ**

# **VT04 - NR M167 / LD**

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# **VT01 - NR M157 / LD**

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# **MAX= ---ºC**

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# **VT03 - NR M159 / LD**

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# **MAX= ---ºC**

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# **VT02 - NR 06 / LD**

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# **MAX= ---ºC**

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# **VT01 - NR M157 / LE**

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# **MAX= ---ºC**

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# **VT02 - NR 06 / LE**

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# **MAX= ---ºC**

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# **VT03 - NR M159 / LE**

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# **MAX= ---ºC**

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# **VT04 - NR M167 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ NARIZ**

# **VT06 - NR 32M119 / LD**

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# **VT07 - NR M117 / LD**

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# **MAX= ---ºC**

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# **VT05 - NR M101 / LD**

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# **MAX= ---ºC**

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# **VT08 - NR M132 / LD**

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# **VT06 - NR 32M119 / LE**

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# **VT08 - NR M132 / LE**

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# **VT07 - NR M117 / LE**

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# **VT05 - NR M101 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ NARIZ**

# **VT09 - NR 11 / LD**

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# **VT10 - NR M164 / LD**

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# **MAX= ---ºC**

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# **VT11 - NR M165 / LD**

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# **MAX= ---ºC**

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# **VT12 - NR M168 / LD**

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# **VT12 - NR M168 / LE**

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# **MAX= ---ºC**

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# **VT11 - NR M165 / LE**

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# **MAX= ---ºC**

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# **VT10 - NR M164 / LE**

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# **VT09 - NR 11 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ NARIZ**

# **VT13 - NR M123 / LD**

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# **MAX= ---ºC**

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# **VT14 - NR M152 / LD**

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# **MAX= ---ºC**

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# **VT15 - NR M156 / LD**

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# **MAX= ---ºC**

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# **VT16 - NR M163 / LD**

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# **VT16 - NR M163 / LE**

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# **VT15 - NR M156 / LE**

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# **VT14 - NR M152 / LE**

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# **VT13 - NR M123 / LE**

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**MAPEAMENTO TÉRMICO – ALGARAVIZ NARIZ**

# **VT18 - NR 15M159 / LD**

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# **MAX= ---ºC**

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# **VT17 - NR 24M114 / LD**

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# **MAX= ---ºC**

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# **VT19 - NR M154 / LD**

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# **MAX= ---ºC**

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# **VT20 - NR M160 / LD**

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# **MAX= ---ºC**

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# **VT18 - NR 15M159 / LE**

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# **VT20 - NR M160 / LE**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**

# **VT19 - NR M154 / LE**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**

# **VT17 - NR M114 / LE**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**

**MAPEAMENTO TÉRMICO – ALGARAVIZ NARIZ**

# **VT21 - NR M162 / LD**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**

# **VT22 - NR M155 / LD**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**

# **VT21 - NR M162 / LE**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**

# **VT22 - NR M155 / LE**

**00/00/0000**

# **MAX= ---ºC**

**00:00:00**